

Appl. No. : 09/254,563
Filed : March 5, 1999

rehydrating and unloading the specimen after storage at the refrigerating temperature and subsequent warming to 0°C or above.

7. (Three times Amended) The method of claim 1, wherein the total concentration of the non-permeating co-solute in any preserved specimen is between 0.3 and 0.7 mol/l.

9. (Three times Amended) The method of claim 1, wherein dehydrating and loading the specimen is performed in two or more stages of contacting the specimen with increasingly higher concentrations of the permeating cryoprotectant and the co-solute.

10. (Three times Amended) The method of claim 1, wherein dehydrating and loading the specimen is performed by simultaneously increasing concentrations of both permeating cryoprotectant and the co-solute from an initial concentration to a final concentration according to a desired profile.

12. (Three times Amended) The method of claim 1, further comprising rehydrating and unloading the specimen by equilibration in [with] a rehydration solution comprising a non-permeating co-solute which effectively decreases the chemical potential of the permeating cryoprotectant.

25. (Twice Amended) The method of claim 1, wherein the non-permeating co-solute is selected from the group consisting of an aldose monosaccharide, a ketose monosaccharide, an amino sugar, an alditol, an inositol, aidonic acid, uronic acid, aldaric acid, amino acid, and a disaccharide.

26. (Twice Amended) The method of claim 12, wherein the non-permeating rehydration co-solute is selected from the group consisting of an aldose monosaccharide, a ketose monosaccharide, an amino sugar, an alditol, an inositol, aidonic acid, uronic acid, aldaric acid, amino acid, and a disaccharide.

REMARKS